



Re: former Smitty Conoco #140 (EPA ID 4260087) - DRAFT CAP 

Rob Rau to: Yen-Vy Van

Bcc: Deborah Hilsman

08/30/2011 01:49 PM

Hi Yen-Vy:

Thank you for providing the above referenced document for EPA's review. Attached are our comments on the Draft CAP:



EPA Comments Proposed Cleanup Action Plan Comments.docx

As you can see, most of our more substantive comments relate to the overall lack detail contained within the plan. While the document provides a good outline of the work to be done, EPA believes that much more detail is necessary before the draft version is ready for public comment. If you have any questions or comments, please let me know.

Rob

Robert Rau
U.S. EPA, Region 10
Office of Compliance & Enforcement, Ground Water Unit
1200 6th Ave, Suite 900, OCE-082
Seattle, WA 98101
tel: (206) 553-6285
fax: (206) 553-0151
email: rau.rob@epa.gov
R10 Tanks: <http://www.epa.gov/r10earth/ust.htm>
R10 Dive Team: <http://yosemite.epa.gov/r10/oea.nsf/webpage/dive+team>

"Yen-Vy Van"

Hi Rob

08/19/2011 04:10:29 PM

From: "Yen-Vy Van" <YVan@aegwa.com>
To: Rob Rau/R10/USEPA/US@EPA
Date: 08/19/2011 04:10 PM
Subject: former Smitty Conoco #140 (EPA ID 4260087) - DRAFT CAP

Hi Rob

Please find attached for your review a DRAFT Cleanup Action Plan for the former Smitty Conoco #140 facility in Toppenish, WA. I'll finalize this document upon receipt of your comments/edits. , I will not mail a hard copy of this document to you due to its draft format.

Yen-Vy

Yen-Vy Van, P.G., P.H.G.
Principal Hydrogeologist
Associated Environmental Group, LLC

1018 Capitol Way S., Suite 201

Olympia, WA 98501

360-352-9835/fax 8164

[attachment "Smitty Toppenish DRAFT CAP 081911.pdf" deleted by Rob Rau/R10/USEPA/US]

**EPA Comments on Proposed Cleanup Action Plan Comments
Former Smitty's Conoco #140 (Dated 8/19/11)**

Site Background

- Include the size and type of the two abandoned tanks that were discovered in 2009.
- 24,000 ft² should be 0.55 acres, not 0.12
- It would be helpful to include another map of the site from previous reports that is zoomed in that shows the location of the USTs and pumps.
- It would be helpful to provide a very brief summary of the petroleum release(s) at the site including previous site investigations that included conclusions made from those investigations regarding the source(s) of contamination.
- The tribe is spelled Yakama (whereas the town and county are Yakima). Also, the First Nations of the Yakima Tribe is not an official name. The official name that should be used is the Yakama Nation.
- The reason why EPA has jurisdiction over the site is because it is located within the boundaries of the Yakama Indian Reservation, not because it is associated with the Yakama Nation.

Remedial Action Objective

- Is cleaning up the vadose source also a remedial action objective?
- Since this is a CAP as required by the AOC and 40 CFR 280.66, it would be better to refer to the action itself as a Corrective Action rather than a Remedial Action which is more CERCLA nomenclature. Alternatively, you can use a generic descriptor such as cleanup goals or objectives.

Proposed Remedial Action

- There are two tables labeled "Table 1" in this document.
- According to their web site, the correct name for the product is Regenesis Oxygen Release Compound (not Releasing).
- Much of what is written in this section is information that can be found in marketing brochures for these products. These product brochures can be added as attachments in addition to paraphrasing information.
- The Regenesis website states that ORC accelerates biodegradation in groundwater and the saturated zone (no mention of the vadose zone as there is no adequate delivery mechanism). However, the CAP states that ORC is effective in the vadose zone as well as in groundwater. This difference should be reconciled. Also, if this product is not effective in the vadose zone, how does this affect your overall goals of using this product?

- Why was additional soil excavation deemed impractical?
- The description of the preferred cleanup method in the CAP is very conceptual with little detail provided. Elements that should be discussed include: design criteria (site specific criteria and well design & spacing), product delivery method and rates of delivery, mixing procedures, anticipated time to achieve MTCA A cleanup goals, what other cleanup technologies were considered but screened out, describe any bench scale or treatability testing and feasibility analyses. Also, the first (RegenOx) and second (ORC) phases of the cleanup should be described in more detail along with a general description of why two phases are necessary.
- Did AEG engineers design the proposed cleanup approach along with input from Regenesis engineers? The design process should be described.
- “RegenOx/ORC are more tailored for remediation at properties where the relative permeability of soils ranges from semi-pervious to pervious with hydraulic conductivity values ranging from 10^{-5} to 1 cm/s and presence of high groundwater table, as compared to other remedial technologies...” This statement should be referenced.
- More information should be included on the project design and implementation. For example:
 - Why did you choose to use both products rather than one or the other independently?
 - Injection spacing of 20 feet was chosen for RegenOx and 10 feet for ORC based on site specific criteria. What is this site specific criteria?
 - How did you choose the number and location of injection points?
 - Are the products being injected simultaneously or one at a time? If they are not being used simultaneously, what is the timing between injections?
 - Are the products injected once or are there multiple injections over a period of time?
 - Are both products being used at each injection location or are some receiving one or the other?
 - At what depths are the products being injected? This should be labeled, especially if it is not the same for each location?
 - What concentrations are being used?
 - Rate of injection?

Performance Monitoring Groundwater Sampling Events

- What is your proposed schedule for groundwater sampling?
- A number limit should not be put on the number of sampling events. The sampling plan can be modified based on the sampling results however monitoring needs to continue until concentrations of all contaminants of concern are below MTCA A cleanup levels.
- The text implies that contaminant concentrations are initially expected to go up in groundwater as petroleum compounds are desorbed from the soil matrix. Is this the case?

Compliance Monitoring of Groundwater

- Because you are injecting chemicals into the groundwater, natural attenuation is not occurring. DO and the oxygen reduction potential should be monitored however they are not indicators of natural attenuation.
- The CAP should identify all of the monitoring parameters for each sampling event including chemical indicators, electron acceptors, etc...
- It will be very helpful to have a bulleted timeline, or similar format, that shows the schedule for injections and monitoring.